

AMENDMENTS TO THE CLAIMS

1. (Currently amended) An inhalation therapy device comprising:

~~comprising~~ an oscillatable membrane for nebulising a liquid,

~~comprising~~ an oscillation generating device having at least one connecting means for supplying an activation signal and by means of which said membrane is caused to oscillate when the activation signal is supplied such that a liquid disposed on one side of the membrane is nebulised through said membrane and is present on the other side of the membrane as an aerosol, and

~~comprising~~ a control means from which an activation signal can be supplied to the at least one connecting means of the oscillation generating device such that said oscillation generating device causes the membrane to oscillate,

wherein

a detection device is provided which detects at least one electric parameter of ~~the~~an oscillatable structure comprising the oscillatable membrane and the oscillation generating device and which determines the presence of a liquid to be nebulised based on the at least one electric parameter, the at least one electric parameter being ~~the~~a current consumption, ~~the~~a power consumption or ~~the~~a current/voltage phase shift of the oscillatable structure.

2. (Currently amended) An inhalation therapy device according to claim 1, wherein

the control means alternately generates activation signals with at least two different frequencies and

the detection device determines the presence of a liquid to be nebulised based on the detected values of the at least one electric parameter at the at least two different frequencies.

3. (Previously presented) An inhalation therapy device according to claim 2, wherein at least one first activation signal having a first frequency causes nebulisation of the liquid.
4. (Currently amended) An inhalation therapy device according to claim 2, wherein ~~the~~ time intervals in which a first activation signal having a first frequency is generated are longer than ~~the~~ time intervals in which an activation signal having a second frequency is generated.
5. (Currently amended) An inhalation therapy device according to claim 1, wherein ~~the~~ detected values are stored for an evaluation over a longer period of time.
6. (Currently amended) An inhalation therapy device according to claim 1, wherein

if the detection device determines that no liquid is present,

said detection device

prevents ~~the~~ supply of activation signals by the control means to the oscillation generating device, and/or

triggers ~~the~~ generation of an optical and/or audio signal by a signal emitting means in order to indicate that no liquid is present.
7. (Currently amended) An inhalation therapy device according to claim 6, wherein

~~the~~an emitted audio signal is a short sound signal and/or a sound sequence and/or recorded or synthesised voice signals.
8. (Previously presented) An inhalation therapy device according to claim 1, wherein

the oscillation generating device comprises an electromechanical transducer unit.
9. (Currently amended) An inhalation therapy device according to claim 8, wherein

the oscillation generating device comprises a support unit to which the electromechanical transducer unit and the oscillatable membrane are attached.

10. (Previously presented) An inhalation therapy device according to claim 1, wherein

an energy supply unit for the inhalation device is integrated in the control means.
11. (Canceled)
12. (Previously presented) An inhalation therapy method for an inhalation therapy device according to claim 1, comprising the following steps:

switching on the inhalation therapy device;

supplying activation signals from the control means to the oscillation generating device in order to nebulise the liquid;

detecting at least one electric parameter of the oscillatable structure comprising the membrane and the oscillation generating device; and

determining whether or not liquid is still present based on the detected parameter of the oscillatable structure, the at least one electric parameter being the current consumption, the power consumption or the current/voltage phase shift.
13. (Previously presented) An inhalation therapy method for an inhalation therapy device according to claim 2, comprising the following steps:

switching on the inhalation therapy device;

supplying activation signals having at least two different frequencies from the control means to the oscillation generating device, the liquid being nebulised at at least one frequency;

detecting values of at least one electric parameter of the oscillatable structure comprising the membrane and the oscillation generating device at the at least two different frequencies; and

determining whether or not liquid is present based on the values of the detected parameter of the oscillatable structure at at least one of the at least two different frequencies.

14. (Previously presented) An inhalation therapy method for an inhalation therapy device according to claim 12, wherein said method further comprises the following steps:

continuing to supply the activation signals from the control means to the oscillation generating device in order to continue nebulisation of the liquid if it is determined that liquid is present; and

stopping the supply of activation signals from the control means to the oscillation generating device and/or emission of an optical and/or audio signal if it is determined that no liquid ~~(3)~~ is present.

15. (Canceled)
16. (Previously presented) An inhalation therapy device according to claim 2, wherein the time intervals in which a first activation signal having a first frequency is generated are longer, by at least a factor of 10, than the time intervals in which an activation signal having a second frequency is generated.
17. (Previously presented) An inhalation therapy device according to claim 1, wherein the oscillation generating device comprises a piezoelectric element.